Percutaneous Endoscopic Gastrostomy (PEG)

An information guide
Introduction
This booklet aims to provide you with some useful information about having a gastrostomy tube inserted and how to look after it. If you have any queries or would like any further information on any aspect of the PEG tube, please contact your doctor, dietitian or alternatively, the appropriate endoscopy unit/ theatre where you had the PEG inserted, during working hours. If out of hours, contact the ward you were discharged from or the emergency admissions unit or accident and emergency department.

What is a PEG?
A gastrostomy tube (PEG) is a small tube made from polyurethane, which is inserted directly into your stomach so that you can be fed. It is a relatively safe and comfortable method of giving liquid nutrition and medicines over a long period of time.

Why PEG?
Your doctor has recommended that you need a gastrostomy tube for the purpose of feeding. It may be because you are currently unable to swallow food and fluids due to your condition or may need your oral intake supplemented as you are not taking in enough food/fluids.

What are the benefits of a PEG?
The PEG tube will provide access for giving liquid food/fluids or medicines directly into your stomach, to give you the nutrients you need.
Are there any alternatives?
You may be fed through a long thin tube passed through your nose into your stomach (nasogastric tube). This tube may be kept up to 6 weeks, if required. However, the tube is often uncomfortable and may get dislodged easily. Another method is where the surgeon places a tube into your small intestine after opening the abdomen, or through keyhole surgery (jejunostomy).

What are the risks of a PEG?
There are small but significant risks associated with PEG tube placement. It can be in the form of a reaction to the injection (sedative or antibiotic) given prior to the procedure or directly related to the procedure itself.

• tear (perforation) in the wall of the pharynx (throat region) and gullet can occur in approximately 0.1% (1 in 1000) cases.

• Peritonitis

• Inflammation of the lining within the abdomen

• necrotising fasciitis

• Infection of the abdomen wall

• bleeding

• bleeding from the stomach may occur in approximately 1% (1 in 100) cases

• puncture of other organs in the abdomen, such as the large bowel, can occur during the introduction of a hollow needle into the stomach

• minor complications such as infection of the skin around the tube, passage of throat secretions or the feed itself going wrongly into the air passages, leading to chest infection or pneumonia can also occur, which would require antibiotics.
If any of these complications were to occur they may require medical treatment, or in some rare cases can lead to an operation.

**Before your PEG procedure**

Your swallowing will be assessed by the speech and language therapist and your nutritional status will be assessed by the dietitian, who will also prescribe your appropriate feeding regime. You may already be in hospital or you may come from home to have the PEG tube inserted.

If you have not had any blood tests within a few days of your appointment for PEG insertion, the hospital will arrange for these to be done. The purpose of the blood tests is to make sure that your blood counts and clotting time are within normal range.

Samples will also be taken to check your blood group should you require a blood transfusion. If for any reason you have objections to this, please tell the staff so that they can inform the doctor.

If you are taking any medication, please tell the staff and bring this with you on the day of your appointment.

If you are taking any tablets that thin your blood, for example Warfarin, please contact the doctor or staff who deal with your anticoagulants.

Check with the doctor looking after you about the possible need for you to stop taking aspirin.

If you are allergic to anything, please tell a member of staff when you are admitted to hospital.

You should have nothing to eat or drink for at least 6 hours before this procedure. If you are currently being fed with a tube in your nose, this must be stopped for at least 6 hours before your procedure. This is to avoid the possibility of any stomach contents finding its way into your lungs during the procedure.
During your PEG procedure

You may be given an injection (sedative) to make you feel relaxed during the procedure. This can be discussed with the doctor. The sedation is not a general anaesthetic. This means you will not be put to sleep. Most people do not remember much of the procedure when they recover afterwards.

There are different types of gastrostomy tubes and the doctor will select one suitable for you.

The tube is put in place using a gastroscope (a flexible tube with a light at the end of it). The gastroscope is passed into the stomach through the mouth. Once the most suitable area to place the tube in your stomach is chosen, a hollow needle will be introduced through the skin into your stomach after injecting a local anaesthetic into the skin. A fine thread is passed through the needle which is then grasped inside the stomach with a pair of forceps passed through the gastroscope. The thread is then brought outside through the mouth. The feeding tube is then tied on to the thread and gently pulled through your mouth until it eventually comes out through your abdominal wall. A disc at the other end of the tube secures the tube in your stomach. The tube is then secured into position with a fixation plate on your abdomen.

In some cases, it is technically difficult to place the Gastrostomy tube using the endoscope, which means it has to be placed surgically by opening up the abdomen. Alternatively, it can be placed through the skin in front of the stomach after injecting local anaesthetic and using x-ray guidance.

After your PEG procedure

The dietitian will recommend a commercially prepared liquid feed which contains all essential nutrients. Initially water will be fed through the tube 6 hours after the procedure for 10 hours.
If that is tolerated, liquid feed will be started slowly as per the regime instructed by the dietitian.

The feed is introduced slowly to begin with so as to allow your stomach time to adjust. You may be fed either continuously or intermittently during the day. You may receive the feed from a bag via a feeding pump, or as small volumes (intermittent boluses) using a syringe at regular intervals.

You may have slight discomfort in your abdomen during the first 72 hours after insertion of the tube. Once feeding starts, this will soon settle down.

To prevent heartburn and feed going into your lungs (aspiration) you will be fed in an upright position or at an angle of 30-45 degrees and should be in this position for one hour after the feed is complete.

It is quite possible that if you are diabetic your blood sugars could go very high once the feeding has started, hence your blood sugars will be frequently checked and the medication for your diabetes will be adjusted accordingly.

If there are leaks of fluid around the tube, pain on feeding or new bleeding then stop the feed immediately and telephone your local A&E Department urgently.

**Administration of medicines**

All medicines should be administered in liquid form. Do not take crushed sustained release tablets or capsules or entericcoated tablets via your gastrostomy tube. Do not add medicines to your enteral feed as it may cause physical/chemical instability of the feed.

**Care of the tube**

To prevent a blockage the gastrostomy tube should be flushed before and after each feed or medication. Whilst in hospital, flush with 30-50 mls of sterile water using a 50ml syringe.
At home use cooled boiled water in a purple-coloured syringe. If the tube is well cared for it can last for years.

**Skin Care**

The area where the tube enters your stomach is called a stoma site. You may experience a slight discharge at the stoma site for the first few days. This area should be cleaned daily with sterile water or cooled boiled water (if you have been discharged home) until the wound heals completely, which takes about ten days. Do not insert any dressing under the fixation cover and do not release the fixation cover until the tract is formed (usually two to three weeks). Make sure you dry the area well after cleaning.

**Do not** have a bath or shower until the stoma site is fully healed, this usually takes about 7 – 10 days. Once the wound has healed, the stoma site should be cleaned with a mild neutral soap and warm water and dried from the tube outwards.

Before you go home, the dietitians will train you to use the equipment and advise you on your feeding requirements. The community dietitian will also visit you at home to check on your progress. When you are about to go home, the community dietitian will advise you on your feeding requirements and will also visit you at home following discharge to check on your progress.

**If you require any further help or advice please ask as we are here to help.**

**If you have a FREKA (Fresenius) PEG Tube**

The manufacturers advise that you rotate the tube all the way round (360 degrees) once a week after the tube has been in place for ten days and the stoma site healed. This is to prevent the development of ‘Buried Bumper Syndrome’ where the inner disc of the gastrostomy tube becomes buried within the stomach wall.
Rotation is done as follows:
1. Wash hands thoroughly with soap and water, and dry.
2. Unclip the catch on the fixation plate and detach tube from the groove in the plate.
3. Move plate away from the skin.
4. Clean tube and stoma area and the underside of the plate and dry. Push 2cm (about 1 inch) of the tube into the stomach and rotate it 360 degrees, then gently pull back to feel resistance.
5. Place the fixation plate to its original position (5mm from the abdominal wall) and reinsert tube in the groove and close the fixation catch.
6. Your fixation plate should not be too tight or too loose. If the rotation causes excess pain and/or will not turn, then try again the next day or seek advice.

Potential PEG Tube Problems

Wound infection: If you notice any redness, swelling, irritation, soreness or discharge from the stoma site you should contact your nurse or GP who will take a swab to identify the bug that is causing your problem. Your doctor may prescribe antibiotics for the infection.

Leakage of feed from the gastrostomy site: Stop feed and contact your GP or nurse immediately.

Nausea, vomiting, diarrhoea or constipation: Stop feeding and contact your nurse, GP or community dietitian immediately.
Blocked tube:
1 Ensure all clamps are opened and massage the tube if you can see a blockage.
2 Using a 50ml purple-coloured syringe flush the gastrostomy tube with 50mls of warm water and leave in the tube for 30 minutes. Using warm water is more effective in dissolving blocking debris. Then re-flush. If it cannot be flushed, aspirate (draw back) with same syringe. Then flush the gastrostomy with 50mls of carbonated (fizzy) water and leave in the tube for 30 minutes. Re-flush.
3 Do not poke anything down your tube.
4 If you cannot unblock your tube ask for advice from your nurse, dietitian or doctor or contact the endoscopy unit, during working hours. Out of hours contact the accident and emergency dept or medical emergency unit at the hospital where the tube was inserted.

Broken or Split Tube: Contact your nurse, dietitian or GP as soon as possible. The tube may have to be removed and a fresh tube placed. This is usually done at the endoscopy unit.

Accidental removal of the tube: If the tube comes out of the stoma, the stoma will begin to close within a few hours. Contact your nurse or doctor immediately, who will then liaise with the endoscopy unit or emergency admissions unit to arrange for a fresh tube to be placed as soon as possible.

Lost Parts: Always try to keep spare parts for your tube. However, please ask your nurse or dietitian should you require any. Alternatively, contact the endoscopy unit where you had the PEG inserted.
General Information

Bathing/showering: Wait until the stoma site has fully healed, usually about ten days after tube insertion. Dry the area thoroughly afterwards. Swimming: Cover the site with a waterproof dressing. Make sure the tube is closed and the clamp applied.

Regular Oral Hygiene: Clean your teeth twice a day with toothbrush. If you do not have any teeth gently brush your mouth and tongue with a soft toothbrush. Frequent mouthwashes may also help to keep your mouth fresh and in good condition.

Adjusting PEG to fit comfortably: Ensure 5mm between your abdomen and the fixation device.

Tube accessories: Clean accessories in a mild detergent and store dry.

Helpline: During working hours please contact the endoscopy unit where you had the PEG inserted.
If English is not your first language and you need help, please contact the Ethnic Health Team on 0161 627 8770

For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

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